



Smarter Balanced Test Development Activities

California Common Core Convening March 8, 2013

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Smarter Balanced Assessment Consortium System Components

- Summative Assessments
- Interim Assessments
- Formative Tools and Practices



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Summative Assessments

- Administered in the last 12 weeks of the school year in grades 3–8 and 11 for English language arts (ELA) and mathematics
- Employ computer adaptive assessments and performance tasks
- Results used to describe student achievement and growth of student learning as part of program evaluation and school, district, and state accountability systems



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Interim Assessments

- Optional comprehensive and content-cluster measures that include computer adaptive assessments and performance tasks, administered at locally determined intervals throughout the school year
- Includes content and curricular “benchmarks”, diagnostic tests, and summative clones



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Formative Tools and Practices

- Tools and processes that are embedded in instruction and are used by teachers and students to provide timely feedback for purposes of adjusting instruction to improve learning
- Digital library

Information on opportunities to get involved at the end of this presentation!



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Test Design Timeline

School Year	Highlight
2011–12	<ul style="list-style-type: none">• Developed content specifications for mathematics and English language arts/literacy• Developed preliminary computer adaptive testing (CAT) specifications• Conducted small scale trials of items and performance tasks in preparation for pilot test
2012–13	<ul style="list-style-type: none">• Write field test items and tasks, includes review of alignment to Common Core State Standards and bias and sensitivity reviews• Develop initial achievement level descriptors (ALDs)• Convene National Advisory Panel to begin developing criteria and policies for resources to be included in Digital Library; State Leadership Teams and State Networks of Educator are recruited• Conduct pilot test of summative and interim assessment items and performance tasks• Score pilot test



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Timeline (cont.)

School Year	Highlight
2013–14	<ul style="list-style-type: none">• Review field test items and tasks, includes review of alignment to Common Core State Standards and bias and sensitivity reviews• Conduct field test of summative and interim assessment items and tasks• Score field test• Set standards; develop reporting ALDs and refine initial ALDs• Disseminate training materials• Publish digital library
2014–15	<ul style="list-style-type: none">• Publish interim assessments• Administer summative assessments during last 12 weeks of school year• Adopt final achievement standards for summative assessment



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Overview of Summative Test and Item Development Activities

- Defining Content to Be Assessed
- Developing Test Items
- Testing Items and Delivery System
- Scoring Tests
- Setting Standards
- Opportunities for Educator Involvement



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Milestones Completed or In Progress

- Content and Item Specifications
- Item Writer/Review Training Modules
- Test Blueprints
- Achievement Level Descriptors
- Item Types, Samples, and Procurement
- Small Scale Trials and Pilot Testing



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Common Core State Standards

- August 2010: California's State Board of Education adopts the Common Core State Standards (CCSS).
- June 2011: California joined Smarter Balanced as a governing state.



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Smarter Balanced Content Specifications

- Provide the foundation that item (test question) writers need in order to create the kinds of items that Smarter Balanced states want for their assessments
- Describe the connection between the CCSS and the assessments using “claims” and “targets”

Content specifications available at:

<http://www.smarterbalanced.org/smarter-balanced-assessments/#item>



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Item Specifications

- Provide item writers with parameters for selected-response (SR) items, constructed-response (CR) items, and performance tasks (PT) by using Evidence-Centered Design principles
- Include scoring rubrics

Item specifications available at:

<http://www.smarterbalanced.org/smarter-balanced-assessments/#item>



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Item Writer/Reviewer Training

- Content
 - Claim and assessment target
 - Depth of knowledge
- Bias and Sensitivity
 - Fairness for all students
- Universal Design
 - Access for all students
- Evidence-Centered Design

Item writer information:

<http://www.smarterbalanced.org/smarter-balanced-assessments/item-writing-and-review/>.



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Item Types and Samples

- Selected Response
 - Multiple choice
 - One correct answer
 - Multiple correct answers
- Constructed Response
- Performance Tasks
- Technology Enabled: use digital media as the stimulus
- Technology Enhanced: include student responses that are not multiple choice or text entry

Sample items: <http://www.smarterbalanced.org/sample-items-and-performance-tasks/>



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Item Procurement and Sustainability

- Item development and review is ongoing for assessment programs
- Sustainability of Smarter Balanced will be determined in part by continued item development
- Two, not necessarily distinct, options:
 - Consortium Develop Items
 - Consortium States Develop Items



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Preliminary Test Blueprints

- Test blueprints communicate the content of the test and how that content will be assessed (e.g., the number of items, item types, score points, depth of knowledge for items).
- Data gathered through pilot and field testing and ongoing simulation studies will inform updates to the blueprints, including setting the weights each content area contributes to the overall composite test score for ELA/literacy and mathematics.

Preliminary test blueprints:

<http://www.smarterbalanced.org/smarter-balanced-assessments/>



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Test Blueprint Example



ELA/Literacy Preliminary Summative Assessment Blueprint Blueprint Table ELA/Literacy Grades 3-5—Table 3a

Estimated Total Testing Time: 3:30 (without classroom component)

Claim	Content Category	Stimuli		Scored Tasks		Total CAT Items by Claim	Approximate Weight for Each Claim within Total Test
		CAT	PT	CAT Items	PT Ratings		
1. Reading	Literary	1	0	6-8	0	12-16	TBD
	Informational	1	0	6-8			
2. Writing	Purpose/Focus/Organization	0	1a	2-3	1	7-10	TBD
	Evidence/Elaboration	0		2-3	1		
	Conventions	0		3-4	1		
3. Speaking/Listening	Listening	2	0	8-10	0	8-10	TBD
4. Research	Research	0	1b	5-6	3	5-6	TBD



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Initial Achievement Level Descriptors (ALDs)

Describe performance on standardized test in terms of levels or categories of performance. Types of ALDs:

- Policy
- Range
- Threshold
- Reporting

College readiness policy included.

Initial ALDs and college readiness policy:

<http://www.smarterbalanced.org/achievement-level-descriptors-and-college-readiness/>



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ALD Development Process for Smarter Balanced

- Drafting Workshop Oct 1–5, 2012
 - 30 K-12 panelists (all governing states represented)
 - 21 higher education panelists (all but one governing state represented)
- Three rounds of review
 - Public review 11/17/12 – 1/15/13
 - 2nd public review 2/4/13 – 2/20/13
 - Pre-vote review 3/5/13 – 3/19/13
- Governing state vote expected Spring 2013
- Initial ALDs subject to further refinement after pilot and field tests
- Reporting ALDs to be created after standard setting



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Policy ALDs

- **Use:** Test development and conceptualization
- **Purpose:** Set tone for the rigor of performance standards expected by sponsoring agency
- **Audience:** Policy makers



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Range ALDs

- **Use:** Item-writing guidance
- **Purpose:** Define content range and limits
- **Audience:** Item writers and test developers



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Threshold ALDs

- **Use:** Cut-score recommendation and standard-setting guidance
- **Purpose:** Define threshold performance at each achievement level
- **Audience:** Standard-setting panelists



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Reporting ALDs

(To be developed after completion of pilot and field tests)

- **Use:** Test-score interpretation
- **Purpose:** Describe the knowledge, skills, and processes that test takers demonstrate and indicate the knowledge and skills that must be developed to attain the next level of achievement
- **Audience:** Stakeholders, such as parents, students, teachers, K–12 leaders, and higher education officials



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College Content-Readiness Policy

The draft initial ALDs and college content-readiness policy framework are part of a critical effort to ensure that the grade 11 summative assessment can be used as evidence that students are ready for entry-level, transferable, credit-bearing courses in English and mathematics and should be exempted from remedial coursework.

The Smarter Balanced college readiness policy was developed with the understanding that college readiness encompasses a wide array of additional knowledge, skills, and dispositions that will not all be measured by the assessment system. The draft college content-readiness definition is focused on the core areas of ELA/literacy and mathematics described by the Common Core State Standards.



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Cognitive Labs

The cognitive labs were designed to capture feedback related to student interaction with the assessment items presented online.

- Student participants reflected demographic diversity
- Results inform future item development
- Started June 2012
- 247 California students participated



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Small Scale Trials

The purpose of the small scale trials was to test the automated scoring engine, the scoring system that will score student responses. The small scale trials help determine:

1. Which items work best for the scoring system in regard to automated scoring; and
2. General rules for item writing to better support automated scoring.

Across member states, participation included 11,545 students.



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Small Scale Trials (cont.)

- Testing window: October 15–November 9, 2012
- Participants selected from a scientific sampling plan based on demographical data
- School participation voluntary
- Administered in grades 4, 7, and 11
- California's participation:
 - Grade 4: 58 schools
 - Grade 7: 38 schools
 - Grade 11: 37 schools



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Pilot Testing

- Administration Training
- Computer-based Testing
 - Accessibility and Accommodations
- Scientific Sample
 - Almost 1,400 California schools and 325,000 students scheduled to participate
 - Testing Window: February 20 – May 24, 2013
- Volunteer Sample
 - More than 1,700 California schools participating
 - Testing Window: April 9 – May 10, 2013
 - Deadline for registration: March 27, 2013



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Future Milestones

- Score pilot test
 - Evaluate and revise rubrics
 - Develop artificial intelligence and human scoring processes
- Analyze pilot test items
- Write and review items for spring 2014 field testing



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Future Milestones (cont.)

- Determine school sample for field test in spring 2014
- Develop, revise, and update administration training materials
 - Staff and test administrators
 - Students and parents
- Implement computer adaptive testing
 - Accessibility and accommodations



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Future Milestones (cont.)

- Score field test
 - Re-evaluate and revise rubrics
 - Improve artificial intelligence and human scoring processes
- Analyze field test items
- Conduct standard setting
- Prepare for implementation of summative assessment (spring 2015)



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Standard Setting

- Summer 2014
- Teachers to establish cut score points for performance levels
- Develop descriptors for reporting scores



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Upcoming Opportunity for Teacher Involvement

Formative practices and strategies are the basis for a digital library of professional development materials, resources, and tools aligned to the Common Core State Standards and Smarter Balanced claims and assessment targets:

- State Network of Educators to be formed to review proposed tools and practices for inclusion in the digital library
- Recruitment of State Network of Educators expected to begin this spring



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Receive Regular Updates on Smarter Balanced Activities

The California Department of Education (CDE) Smarter Balanced update is a bimonthly e-mail that reports on current and upcoming Smarter Balanced development activities.

To join the CDE Smarter Balanced e-mail list, send a blank e-mail to: subscribe-sbac@mlist.cde.ca.gov.



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For Further Information

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Smarter Balanced Assessment Consortium Web Site

<http://www.smarterbalanced.org/>

CDE Smarter Balanced Web Page

<http://www.cde.ca.gov/sbac/>



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Thank you!